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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,897	02/04/2004	Narasimhan Gautam	15060-60	3893
	7590 01/13/200 RASCHE (15060)	9	EXAMINER	
ARMSTRONG	TEASDALE, LLP		KAM, CHIH MIN	
SUITE 2600	METROPOLITAN SQUARE E 2600		ART UNIT	PAPER NUMBER
SAINT LOUIS, MO 63102-2740			1656	
			NOTIFICATION DATE	DELIVERY MODE
			01/13/2009	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)		
	10/771,897	GAUTAM ET AL.		
Office Action Summary	Examiner	Art Unit		
	CHIH-MIN KAM	1656		
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	correspondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D/ Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period v Failure to reply within the set or extended period for reply will, by statute. Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on 10 No.     This action is <b>FINAL</b> . 2b) ☐ This 3)☐ Since this application is in condition for alloware closed in accordance with the practice under Example 2.	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4) ☐ Claim(s) 4,5,7-35 and 37-45 is/are pending in the day of the above claim(s) 7-34,37 and 39-45 is.  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 4,5 and 35 is/are rejected.  7) ☐ Claim(s) 38 is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or	are withdrawn from consideratio	n.		
Application Papers				
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 04 February 2004 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	e: a)⊠ accepted or b)⊡ objecte drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal F 6)  Other:	ate		

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### **DETAILED ACTION**

1. The Request for Continued Examination (RCE) filed on November 10, 2008 under 37 CFR 1.114 is acknowledged. An action on the RCE follows.

## Status of the Claims

2. Claims 4, 5, 7-35 and 37-45 are pending.

Applicants' amendment filed October 9, 2008 is acknowledged. Applicants' response has been fully considered. Claims 4, 35 and 38 have been amended, and claim 6 has been cancelled. Claims 7-34, 37 and 39-45 are non-elected inventions and are withdrawn from consideration in this Office Action. Therefore, claims 4, 5, 35 and 38 are examined.

Regarding rejoining the process claims with the product claims, please see pages 5-6 of the restriction requirement dated June 14, 2006. Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

## Withdrawn Claim Rejections - 35 USC § 103

3. The previous rejection of claims 4, 5, 35, and 38, under 35 U.S.C. 103(a) as being unpatentable over Devreotes at al. (U.S. 2002/0048811) in view of Wittamer et al. (U.S. 2003/0104478) is withdrawn in view of applicants' amendment to the claims, and applicants' response at pages 9-10 in the amendment filed October 9, 2008.

## New Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 5 is indefinite because the claim does not further limit claim 4, which claim 5 is dependent from.

## Claim Rejections-Obviousness Type Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 4, 5 and 35 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 and 45-46 of copending application 10/914,049 (based on the preliminary amendment filed 10/16/07). Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 4, 5 and 35 in the instant application disclose a functional G protein biosensor comprising a mammalian  $\alpha$  subunit comprising a first amino acid sequence encoding at least one of a first fluorescent or a luminescent protein, and a mammalian  $\beta\gamma$  subunit complex, wherein the  $\beta$ 

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subunit comprises a second amino acid sequence encoding at least one of a second fluorescent or luminescent protein and the y subunit comprise a third amino acid sequence encoding at least one of a third fluorescent and or luminescent protein, wherein said first, second and third fluorescent or luminescent proteins are at least FRET or BRET capable. This is obvious variation in view of claims 1-3 and 45-46 of the co-pending application which disclose a functional biosensor comprising heterotrimeric G protein alpha, translocatable beta or translocatable gamma or translocatable beta and gamma subunits wherein at least the beta, gamma, or both beta and gamma subunits are tagged with a fluorescent protein or a luminescent protein. Both sets of claims cite directed to a functional biosensor comprising heterotrimeric G protein alpha, translocatable beta or translocatable gamma or translocatable beta and gamma subunits wherein at least the beta, gamma, or both beta and gamma subunits are tagged with a fluorescent protein or a luminescent protein. Thus, claims 4, 5 and 35 in present application and claims 1-3 and 45-46 in the co-pending application are obvious variations of a functional biosensor comprising heterotrimeric G protein alpha, translocatable beta or translocatable gamma or translocatable beta and gamma subunits wherein at least the beta, gamma, or both beta and gamma subunits are tagged with a fluorescent protein or a luminescent protein.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### Claim Objections

7. Claim 38 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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### Conclusion

8. Claims 4, 5 and 35 are rejected; and claim 38 is objected to.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached at 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Chih-Min Kam/
Primary Examiner, Art Unit 1656

**CMK** 

January 7, 2009